TEL/LOGIC INC.

Winston E. Himsworth
President

June 13, 1995

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Mr. William F. Caton, Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, DC 20554

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Reference: WT Docket No. 95-47

Dear Mr. Caton:

Enclosed for filing are the original and five copies of Tel/Logic Inc.'s response to the Commission's Notice of Proposed Rule Making to amend the IVDS rules to allow licensees to provide mobile services to subscribers.

Sincerely,

Winston E. Himsworth

/abm
Enclosures

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51 Shore Drive • Plandome, NY 11030 • (516) 365-7241

Before the

Federal Communications Commission

Washington, D.C. 20554

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In the Matter of	
Amendment of Part 95 of the Commission's Rules to allow Interactive Video and Data Service licensees to provide mobile service to subscribers	WT Docket No. 95-47

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Reference: Notice of Proposed Rule Making adopted April 13, 1995: RM-8476

Tel/Logic Inc.
51 Shore Drive
Plandome, N.Y. 11030

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
Amendment of Part 95 of the Commission's Rules to allow Interactive Video and Data Service licensees to provide mobile service to subscribers	)	WT Docket No. 95-47

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Reference: Notice of Proposed Rule Making adopted April 13, 1995: RM–8476

The referenced NPRM proposes to permit IVDS licensees to provide ancillary mobile services to fixed service subscribers within their service area. In relation to this proposal, the NPRM requests comments on RTU power levels, duty cycle limitations, and mobile service restrictions.

Tel/Logic Inc. ("Tel/Logic") strongly supports this proposed amendment to the IVDS rules. As it argued in a filing last September in support of EON's petition for rulemaking, Tel/Logic believes that such an amendment:

1. Will provide IVDS licensees with the ability to create unique and cost effective interactive television-based messaging services for family and community use; and

2. Will permit licensees to develop interactive television market niches that would differentiate IVDS from two-way wired services being planned or implemented by the cable and telephone industries.

More broadly, Tel/Logic believes that the initial IVDS business proposition may be flawed. Interactive television represents a potentially large but as yet unproven market. If and when the market develops, it will likely be dominated by companies substantially larger than the typical IVDS licensee and by companies with ownership of, or broader access to, software products and alternative distribution channels. To be successful, IVDS licensees must be permitted to offer differentiable and niche type services, such as mobile, for the interactive market. Equally important, IVDS licensees must not be artificially restricted by operating rules designed to constrain business opportunities to earlier visions of interactive television.

This filing reiterates many of Tel/Logic's previous arguments in favor of amending the IVDS rules to permit ancillary mobile usage, and comments on several related issues as requested in the NPRM.

I. Authorization to permit the use of both fixed and mobile terminals will provide IVDS licensees with the ability to create unique and cost effective interactive television-based messaging services for family and community use.

Television is the most pervasive of residential electronic services. While it is common to think of telephones or, increasingly, personal computers as the primary terminals for communications and as the basic access "ramps" for the much discussed "information superhighway," television is by far the major source of information and entertainment for most Americans. Television sets exceed even telephones in household penetration; average daily usage is significantly higher. With the advent of interactive services, the role of television as a cross-generational family communications service will only expand.

One exciting opportunity is the development of family and community messaging. With interactive services such as IVDS, a household television set can become an efficient family message center offering significantly more capability

than a "Post-It Note" stuck to a refrigerator. Messages can be received and stored for individual family members. Messages can be easily generated using pre-formatted structures that eliminate the need for keyboarding. Messages can be exchanged, not only between family members, but throughout the neighborhood or community. For the first time, it will be possible to create a fully electronic and broadly available community bulletin board providing not only listings of events but, even more importantly, the ability to easily schedule events and conduct polls.

To be fully functional, access to a television-based message service must be provided on a timely basis to individuals currently away from their television sets. Basic message notification and response capability is needed throughout the local IVDS license area using low power, inexpensive pagers or other simple mobile message terminals.

II. Authorization to permit the use of both fixed and mobile terminals will permit licensees to develop interactive television market niches that would differentiate IVDS from two-way wired services being planned or implemented by the cable and telephone industries.

A number of different technologies have been proposed and/or are being implemented to provide interactive television services. The cable television industry and, at least on an experimental basis, the telephone industry are actively instituting network upgrades to offer two-way broadband video and data services. Both industries are characterized by far larger and better capitalized companies; both have established customer bases; and both will utilize transmission paths unconstrained by IVDS bandwidth, propagation, and duty cycle limitations.

While IVDS has a window of opportunity to introduce interactive services in many television markets, and may have an advantage in providing services to non-cabled households, it expects aggressive longer-term competition from the wired video providers. IVDS's ability to develop a range of interactive services integrating both fixed and mobile terminals is seen as a necessary condition to establishing a unique and defensible market niche. Permitting IVDS operators to

both compete and co-exist with cabled forms of interactive television would extend the range of services available to residential television users.

III. The definition of "ancillary mobile service" should be broadly construed. There is no compelling competitive reason to limit mobile usage to fixed service subscribers only.

Given the expected price points, and the service's limited transmission capabilities, the extension of IVDS to mobile messaging terminals would be unlikely to compete directly with the increasingly sophisticated services contemplated by existing paging companies and narrowband PCS licensees. To the contrary, IVDS mobility would help create new and unique market niches that may ultimately serve to introduce users to more upscale, non-IVDS, message services.

Limiting mobile services to fixed service subscribers would too narrowly define IVDS by effectively eliminating the development of many fixed-to-mobile or mobile-to-fixed applications.

IV. The rules should continue to authorize 20 watts power for fixed RTUs. Limiting either fixed or mobile RTU power to 100 milliwatts would force the development of IVDS systems based on a single vendor's design.

EON's proposal to limit mobile RTU power to 100 milliwatts is premised on its own IVDS system design employing multiple remote receivers. This is a promising design allowing the use of low-powered fixed or mobile RTUs, but it is by no means the only alternative. Other potential vendors have proposed higher powered RTU systems that, by requiring single receivers, may reduce system infrastructure costs.

IVDS system and equipment design is still in a developmental stage. Tel/Logic believes that it would be premature to establish power limits,

particularly for fixed RTUs, based on a multiple receiver configuration proposed by a single vendor.

Greater justification may exist for setting lower power limits on mobile RTUs as a means of controlling transient interference problems. A 100 milliwatt limit, however, appears overly conservative in light of other techniques — and the general responsibilities of the IVDS licensees — to minimize interference. No separate power limits on mobile RTUs should be required in markets located entirely outside of the Grade B contours of channel 13 television stations.

V. The 5-seconds-per-hour duty cycle limitation represents an unnecessary restriction on IVDS application development. The limitation should not apply to mobile RTUs and should be eliminated for fixed RTUs.

As originally proposed by MSTV, the duty cycle limitation was designed to protect reception of TV channel 13. In light of other FCC rules on transmitter power and antenna height— as well as the general responsibilities of the IVDS licensees to monitor and protect against interference — the duty cycle limitation is redundant and unnecessary. .

As a means to "effectively preclude IVDS from abandoning interactive communications," the limitation serves only to force IVDS into applications involving relatively short message bursts. Short messaging may have defined interactivity five years ago, but not today. Full service cable and broadband telephone systems are beginning to provide interactive video and data services involving such applications as internet access, video conferencing, and sophisticated gaming — all requiring large file or data transfers. Depending upon bandwidth, many of the new interactive applications require single transmissions well in excess of five seconds.

Besides limiting its ability to compete in emerging interactive markets, the IVDS duty cycle requirement adds costs and complexities to what should otherwise be a simple and economical service. As one duty cycle example, transmission of even a medium-sized internet data file would have to be done on a

store-and-forward basis in a high-speed burst utilizing a major portion of IVDS's 500 KHz bandwidth. Without a duty cycle limitation, the same file might be transmitted more continuously over a narrower bandwidth channel, perhaps using a modified version of 220 MHz radios with 5 KHz channelization.

VI. IVDS faces a tough challenge in building a viable niche in an increasingly competitive interactive market. New rules that limit IVDS's application scope, increase system costs and complexities, and are unnecessary in providing channel 13 interference protection, should be avoided; existing rules that do the same should be eliminated.

The proposed amendment to permit ancillary mobile use of IVDS service is a major step forward in the development of IVDS's role as a competitive interactive industry participant. It is critical that this step not be undermined with limiting rules governing the definition of "ancillary," low RTU power levels, or duty cycles. Indeed, the Commission should use this opportunity to revisit and repeal unnecessary limitation on fixed IVDS services.

Respectfully submitted,

Tel/Logic Inc.

By: _____

Winston E. Himsworth
President
51 Shore Drive
Plandome, N.Y. 11030
(516) 365-7241

Dated: June 13, 1995